AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-25 (Canceled).

26. (Currently Amended) A receiver front-end for use in a transceiver station of a wireless communication network, said transceiver station being associated with an antenna assembly comprising a primary and at least a secondary antenna, said receiver front-end being adapted for insertion between said antenna assembly and signal processing sections of said transceiver station, said receiver front-end comprising a primary and at least a secondary receiving branch, said primary receiving branch being adapted for coupling to said primary antenna and to said signal processing sections of said transceiver station and said secondary receiving branch being adapted for coupling to said secondary antenna and to said signal processing sections, ~~said primary receiving branch comprising non-superconducting components, comprising at least a non-superconducting filter, and~~ said secondary receiving branch comprising at least [[a]] one superconducting component, wherein said primary receiving branch consists of non-superconducting components including at least one non-superconducting filter.

27. (Canceled).

28. (Previously Presented) The receiver front-end according to claim 26, wherein said superconducting component comprises a low-loss filter obtained with a technology based on high critical temperature superconducting materials.

29. (Previously Presented) The receiver front-end according to claim 28, wherein said secondary receiving branch comprises a cryogenic, low-noise amplifier cascade connected to said low-loss filter.

30. (Currently Amended) The receiver front-end according to claim 29, wherein said low-loss filter and said cryogenic, low-noise amplifier are both enclosed in a cryogenic refrigerator unit ~~operating at cryogenic temperatures~~.

31. (Previously Presented) The receiver according to claim 26, wherein said primary receiving branch comprises a non-superconducting receiving filter and a non-cryogenic, low-noise amplifier mutually connected in cascade arrangement.

32. (Previously Presented) The receiver according to claim 26, wherein said primary receiving branch comprises a non-superconducting receiving filter and a cryogenic, low-noise amplifier mutually connected in cascade arrangement.

33. (Previously Presented) The receiver according to claim 32, wherein said low-loss filter, said cryogenic, low-noise amplifier of said primary receiving branch and said cryogenic, low-noise amplifier of said secondary receiving branch are enclosed in a cryogenic refrigerator unit.

34. (Previously Presented) The receiver front-end according to claim 30 wherein said cryogenic refrigerator unit operates at cryogenic temperatures lower than 250 K.

35. (Previously Presented) The receiver front-end according to claim 30, wherein said cryogenic refrigerator unit operates at cryogenic temperatures lower than 100 K.

36. (Previously Presented) The receiver front-end according to claim 30, wherein said cryogenic refrigerator unit operates at cryogenic temperatures higher than 60 K.

37. (Currently Amended) The receiver front-end according to claim 28, wherein said low-loss filter has a noise figure lower ~~that~~ than 0.7 dB.

38. (Previously Presented) The receiver front-end according to claim 28, wherein said low-loss filter has a noise figure lower than 0.5 dB.

39. (Currently Amended) The receiver front-end according to claim 28, wherein said low-loss filter has a noise figure lower ~~that~~ than 0.3 dB.

40. (Previously Presented) The receiver front-end according to claim 26, wherein said primary receiving branch is connected in parallel to a primary transmission branch, said primary transmission branch comprising a transmitting filter.

41. (Previously Presented) The receiver front-end according to claim 26, wherein said secondary receiving branch is connected in parallel to a secondary transmission branch, said secondary transmission branch comprising a transmitting filter.

42. (Previously Presented) The receiver front-end according to claim 41, wherein said transmitting filter in said secondary transmission branch is obtained with a technology based on high critical temperature superconducting materials.

43. (Previously Presented) The receiver front-end according to claim 26, wherein the receiver front-end is mounted at such a distance from said antenna assembly that losses due to antenna lead-in are negligible with respect to the noise figure introduced by said receiver front-end.

44. (Previously Presented) The receiver front-end according to claim 43, wherein said distance is no greater than 3 m.

45. (Previously Presented) The receiver front-end according to claim 44, wherein said distance is no greater than 1 m.

46-49 (Canceled).

50. (Currently Amended) A transceiver station of a wireless communication network, said transceiver station being associated with an antenna assembly comprising a primary and at least a secondary antenna, comprising a receiver front-end ~~according to claim 26,~~ being adapted for insertion between said antenna assembly and signal processing sections of said transceiver station, said receiver front-end comprising a primary and at least a secondary receiving branch, said primary receiving branch being adapted for coupling to said primary antenna and to said signal processing sections of said transceiver station and said secondary receiving branch being adapted for coupling to said secondary antenna and to said signal processing sections, said secondary receiving branch comprising at least one superconducting component, wherein said primary receiving branch consists of non-superconducting components including at least one non-superconducting filter, wherein said signal processing sections are coupled to said receiver front-end.